

ABSTRACT

An apparatus for obtaining tomosynthesis data of an object (5) comprises a radiation source (1) emitting radiation (2) centered around an axis of symmetry (3); a radiation detector (6) comprising a stack of line detectors (6a), each being directed towards the divergent radiation source to allow a ray bundle ($b_1, \dots, b_n, \dots, b_N$) of the radiation that propagates in a respective one of a plurality of different angles ($\alpha_1, \dots, \alpha_n, \dots, \alpha_N$) to enter the line detector; an object area arranged in the radiation path between the divergent radiation source and the radiation detector for housing the object; and a device (7) for moving the radiation source and the radiation detector relative the object essentially linearly in a direction (8) essentially orthogonal to the axis of symmetry, while each of the stack of line detectors is adapted to record a plurality of line images of radiation as transmitted through the object in a respective one of the plurality of different angles.